

**IN THE ABSTRACT:**

Replace the attached Abstract of the Disclosure with the Abstract of the Disclosure as originally filed.

**REMARKS**

The above amendments are being made to place the application in better condition for examination.

Entry of the amendment is respectfully solicited.

Respectfully submitted,



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ABSTRACT OF THE DISCLOSURE

In a unipolar transverse flux machine, in particular a motor, having a rotor, which is comprised of two coaxial, ferromagnetic, toothed rotor rings, and a permanent magnet ring, which is magnetized in an axially unipolar fashion and is clamped axially between these rotor rings, and having a stator, which is concentric to the rotor shaft and has U-shaped stator yokes that represent the magnet poles, yoke elements, and a stator winding, in order to achieve an extremely flat design and to assure a definite start in a particular direction, the stator winding is embodied with two coils, whose one coil side extends respectively over a group of stator yokes and yoke elements arranged in succession in the circumference direction, along the side of the yoke elements remote from the rotor shaft, between the yoke legs, where the group spanned by the coil side of the one coil is disposed spatially offset on the stator circumference and electrically offset by 90° in relation to the group spanned by the coil side of the other coil.

**VERSION WITH MARKINGS TO SHOW CHANGES MADE****IN THE TITLE:**

**Page 1,** The Title of the Invention has been amended as follows:

--UNIPOLAR [TRANSVERSAL] TRANSVERSE FLUX MACHINE--

**IN THE SPECIFICATION:**

Paragraph [0002] has been amended as follows:

[0002] The invention is directed to an improved unipolar [transversal] transverse flux machine.

Paragraph [0003] has been amended as follows:

[0003] In a unipolar [transversal] transverse flux machine of this kind (DE 100 21 914.4), it has already been proposed to embody the stator winding as an annular coil, which is disposed coaxial to the rotor axis and which, on the outside of the yoke elements remote from the rotor axis, passes through the yoke legs of the stator yoke. As a result, the machine can be one-stranded, i.e. can be embodied with one stator module and one rotor module, or can be multi-stranded, with at least two stator modules and rotor modules, where each of the stator modules disposed axially adjacent to each other has an annular coil of this kind. In the two-strand design, the stator modules or rotor modules are disposed electrically offset from each other by at least 90° and the annular coils are supplied with current pulses in a bipolar fashion as a function of the rotation angle of the rotor.

**Page 2**, Paragraph [0006] has been amended as follows:

[0006] The unipolar [transversal] transverse flux machine according to the invention has the advantage of an extremely flat design and a definite start in a particular direction, which is assured by the two-strand design of the stator.

Paragraph [0010] has been amended as follows:

[0010] Fig. 1 is a perspective depiction of a unipolar [transversal] transverse flux motor,

**Page 3**, Paragraph [0014] has been amended as follows:

[0014] The unipolar [transversal] transversal flux motor shown in various views and sections in the drawings as an exemplary embodiment of a universal unipolar [transversal] transversal flux machine has a stator 11 and a rotor 12, which rotates inside the stator 11 and is non-rotatably supported on a rotor shaft 13.

**IN THE CLAIMS:**

Claim 14 has been amended as follows:

14. (Amended) A unipolar [transversal] transverse flux machine, in particular a unipolar [transversal] transverse flux motor, comprising

a rotor (12), which is non-rotatably supported on a rotor shaft (13) and is comprised of two coaxial ferromagnetic rotor rings (14, 15), which on their outer circumference remote from the rotor shaft (13), are provided with constant tooth spacing, and having a permanent magnet ring (16), which is magnetized in an axially unipolar fashion and is clamped axially between the rotor rings (14, 15), and

a stator (11), which is concentric to the rotor shaft (13) and has U-shaped stator yokes (19) with two yoke legs (191, 192) that are connected to each other by a crosspiece (193), which stator yokes (19) are fixed to a housing (10) with a spacing that corresponds to the tooth spacing, and are disposed so that the one yoke leg (191) is disposed opposite the one rotor ring (14) and the other yoke leg (192) is disposed opposite the other rotor ring (15), each with a radial gap distance, yoke elements (20), each of which is disposed between respective stator yokes (19) arranged one after the other in the rotation direction of the rotor (12), extends axially over the two rotor rings (14, 15), and is disposed opposite them with a radial gap distance, and a stator winding (21),

the stator winding (21) having two coils (22, 23), each with two coil sides (221, 222 or 231, 232), whose one coil side (221 or 231) extends coaxial to the rotor shaft (13), respectively over a group of stator yokes (19) and yoke elements (20) arranged in succession in the circumference direction, along the side of the yoke elements (20)

remote from the rotor shaft (13), between the yoke legs (191, 192), and wherein the group spanned by the coil side (221) of the one coil (22) is disposed spatially offset on the stator circumference and electrically offset by 90° in relation to the group spanned by the coil side (231) of the other coil (23).

Page 12, The Abstract of the Disclosure has been amended as follows:

### **ABSTRACT OF THE DISCLOSURE**

In a unipolar [transversal] transverse flux machine, in particular a motor, having a rotor, which is comprised of two coaxial, ferromagnetic, toothed rotor rings, and a permanent magnet ring, which is magnetized in an axially unipolar fashion and is clamped axially between these rotor rings, and having a stator, which is concentric to the rotor shaft and has U-shaped stator yokes that represent the magnet poles, yoke elements, and a stator winding, in order to achieve an extremely flat design and to assure a definite start in a particular direction, the stator winding is embodied with two coils, whose one coil side extends respectively over a group of stator yokes and yoke elements arranged in succession in the circumference direction, along the side of the yoke elements remote from the rotor shaft, between the yoke legs, where the group spanned by the coil side of the one coil is disposed spatially offset on the stator circumference and electrically offset by 90° in relation to the group spanned by the coil side of the other coil.